

# Indoor Air Quality Within Industry

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APPG Air Pollution

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# Air quality as an industrial workplace issue

## Why?

- Air pollution is a huge health risk.
- Employers have a duty of care to protect their staff.
- Cleaner air will lead to happier and healthier more productive employees.

## Call to action

- Lower the acceptable limits for air pollutants in the workplace
- Increase workplace monitoring of air pollutants
- Implement a workplace communications campaign on air pollution

## Outputs

Communications campaign telling the stories of the impacts of poor air quality for real workers



White paper to be shared with the HSE, MPs and businesses detailing our recommendations for clean air workplaces



Mid-late September

# Our experience

- We are the market leaders in the field of industrial air purification
- A typical Zehnder customer is not focussed on achieving air quality compliance, they will have generally already achieved this
- Most still 'feel' they have some issues with air quality even if they are well within legal limits
- Staff may express concerns and businesses are concerned with providing the best environment they can for their staff
- But our key learning was that this is best combined with a focus on uncovering the **true costs and implications of poor air quality**



# BOC case study

## Their Business

- The supply, filling and refurbishing of gas cylinders for industry, hospitality and healthcare

## The Cause

- General airborne dust caused by activity of fork lift trucks, ingress from outside
- No single source of dust
- Dust levels well within legal limited limits

## The Effect

- 'At the end of the shift staff left looking like they'd been at a coalface'
- Black nose syndrome
- 6 cases of asthma amongst staff
- A layer of dust over workstations requiring cleaning on every shift
- Production regularly stopped in order to focus on cleaning in advance of audits



# BOC case study – what happened next?

## Our Solution

- Installation of Zehnder Clean Air units in worst areas

## The Result

- A measured reduction of airborne dust of between 70/80%

## The Effect

- Better, cleaner ‘fresher’ environment for staff
- Black nose syndrome eliminated
- 5 asthma cases reported to have cleared up
- Cleaning reduced by over 80%
- Time saved on cleaning reallocated to production



**Clean air is great for health but also great for productivity**

# Clean air for industry

## Present

- While most businesses are in compliance with UK law, 66% of businesses we have measured show levels greater than the WHO's 50µg/m<sup>3</sup> recommended levels of PM10 particulate
- The HSE estimates that 12,000 deaths are caused every year from lung diseases whose cause can be traced back to the workplace – what is harder to define are the milder to moderate illnesses which impact on workplace absences and productivity
- This means that both industry and the state are spending time and money on dealing with the effects of poor air quality that could potentially be mitigated at an earlier stage

## Future

- A combination of tighter regulation and raised awareness for businesses to focus on measuring their PM levels and understanding the real costs of poor air quality
- Businesses to view managing their air quality as a daily ongoing measure, not a periodic
- As the science becomes clearer, air cleaning could potentially help as part of a regime to help managing the spread of viruses and other pathogens